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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/618,257	07/10/2003	Zamg-Arh George Wu	07783.0063.NPUS00	3222

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EXAMINER

KOPEC, MARK T

ART UNIT PAPER NUMBER

1751

DATE MAILED: 01/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/618,257

Applicant(s)

WU ET AL.

Examiner

Mark Kopec

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-67, 69-70 is/are pending in the application.
- 4a) Of the above claim(s) 23-26 and 41-67 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21, 22, 27-40, 69 and 70 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

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Applicant's election without traverse of Group I and Species 2 (carbonaceous particles) in the reply filed on 10/28/05 is acknowledged.

The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an

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invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 21, 22, 27-40, 69 and 70 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 22-28 and 33-41 of copending Application No. 10/785,644. Although the conflicting claims are not identical, they are not patentably distinct from each other because both the instant claims the above listed claims of 10/785,644 are drawn to methods/compositions used in electrophoretic display comprising adding conductive particles to "an electrode protecting layer". The polymeric matrix and conductive component (i.e. graphite) are specified in each set of claims. The claim terminology "nanoparticles" in the copending application encompasses and renders obvious the claimed conductive particles (and particle sizes).

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 21, 22, 27-40, 69 and 70 are rejected under 35

U.S.C. 102(b) as being anticipated by Ogata et al (4,466,701).

Ogata discloses highly reliable electrooptical device comprises a pair of electrode plates facing each other with a space and sealed along their periphery by a sealing material to form a cell and an electrooptical material sealed in the cell. The device is characterized in that a protective layer of an electrically conductive material comprising electrically conductive particles and a binder is coated on each lead terminal extending outside the sealing material and the protective layer is partially embedded in the sealing material (Abstract). The electrooptical devices include liquid crystal display devices, electrochromic display devices or electrophoretic display devices, which comprise a pair of electrode plates facing each other with a space and sealed along their periphery by a sealing material to form a cell and an

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electrooptical material sealed in the cell, and they may be used alone or in combination (Col 2, lines 39-41). The protective layer of the present invention is made of an electrically conductive material composed of a mixture comprising electrically conductive particles and a binder. It is thereby possible to readily form a relatively thick protective layer. As the electrically conductive particles, there may be used particles of carbon, gold, silver, copper, chromium, nickel, titanium and so forth. They are mixed in an amount of from 10 to 90%. The particles may not necessarily be spherical but they may be, for instance, in a form of fibers. As the binder, there may be used a variety of binders such as an epoxy resin, a silicone resin, or a phenol resin. It is optionally selected depending upon the nature of the sealing material and the nature of the electrooptical material, and it is mixed in an amount of from 90 to 10% (Col 4, lines 1-17). The particle size of the electrically conductive particles must be smaller than the gap between the base plates of the electrooptical device and must usually be at most a few microns. The electrically conductive material is coated on the lead terminal usually in a thickness of from 2 to 50. μ . However, in a case where a plurality of devices are simultaneously formed, this thickness should preferably be thinner than the gap between the base plates. It

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is particularly preferred to use carbon particles as the electrically conductive particles of the present invention. They are corrosion resistant by their nature whereby corrosion can hardly be formed. The electrically conductive material is usually applied by a printing method. Screen printing is most preferred because of the simplicity of the operation. For instance, it is possible to form a layer of the conductive material of a thickness of from 2 to 15. μ . with use of a 400 mesh screen or from 8 to 25. μ . with use of a 325 mesh screen. The base plate thus coated with an electrically conductive material is combined with other base plate printed with a sealing material so that the respective electrode sides faces each other, and they are pressed to form a cell. In a case where lead terminals are provided on both base plates, an electrically conductive material is applied to each lead terminal, and a sealing material is applied to the peripheral portions where no lead terminal is provided, and then the base plates are assembled with the respective electrode sides being face to face (Col 4, lines 35-61). The reference specifically or inherently meets each of the claimed limitations. With respect to claims 33, 35 and 37, the examiner notes these claims are drawn to a composition, and the recited intended use

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language does not distinguish over the identical prior art compositions.

The reference is anticipatory.

Claims 21, 22, 27-40, 69 and 70 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Albert et al (2003/0137717).

Albert discloses encapsulated electrophoretic display having a plurality of non-spherical capsules disposed substantially in a single layer on a substrate (Abstract). The reference teaches an adhesive layer substantially planar to the rear substrate (para 0015, 0016, 0022, Fig 9b). The layer of material can substantially fill interstices within the film. The layer of material can have a thickness of less than or equal to about 50 .mu.m. The layer of material can include an adhesive containing, for example, carbon particles, gold particles, aluminum particles, platinum particles, silver particles, plated polymer spheres, plated glass spheres, indium tin oxide particles, polyacetylene, polyaniline, polypyrrole, P-DOT, and/or polythiophene. The binder can include a binder solid and a ratio of the mass of the binder solid to the mass of the capsules of at least a portion of the element can be from about 1:2 to about 1:20 (0022). The examiner respectfully submits that the disclosed layer meets each of applicant requirements

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"electrode protecting layer of the display" (see page 6 of instant specification). The reference specifically or inherently meets each of the claimed limitations.

The reference is anticipatory.

In the event that any minor modifications are necessary to meet the claimed limitations, such as selection of a particular particle size, such modifications are well within the purview of the skilled artisan.

In view of the foregoing, the above claims have failed to patentably distinguish over the applied art.

The remaining references listed on forms 892 and 1449 have been reviewed by the examiner and are considered to be cumulative to or less material than the prior art references relied upon in the rejection above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Kopec whose telephone number is (571) 272-1319. The examiner can normally be reached on Monday - Friday from 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Yogendra Gupta can be reached on (571) 272-1316. The fax phone number for the

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organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Mark Kopec
Primary Examiner
Art Unit 1751

MK

January 21, 2006